

# Object-Oriented Technology and UML

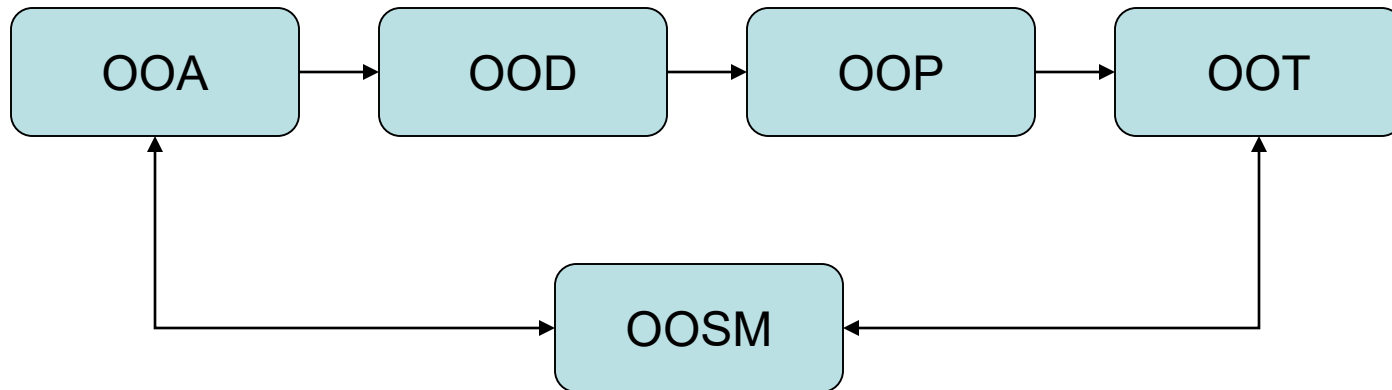
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# About This Course

- The main curriculum
- Also associated with specific technology



# Why This Course?

- Unified Modeling Language
- From Programmer to Systems analyst
- From Worker to Architect

# Objectives

- UML notations
- Object-Oriented analysis and design using UML
- Practical projects using UML

# Course References

- Grady Booch, James Rumbaugh, Ivar Jacobson. The Unified Modeling Language User Guide, 2nd Ed. 2005
- Carig Larman. Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and the Unified Process, 3rd Ed. 2006
- Scott W. Ambler. The Elements of UML 2.0 Style 2nd Ed. 2007
- The latest UML specification
- .....

# Overview

- Introduction to concepts of OO
- Introduction to RUP and UML
- UML tools
- Requirements modeling
- Static modeling
- System dynamics modeling
- System physical modeling

# Grading

## ● 40%

- Attendance is critical
- Quiz
- **Projects and Reports**

## ● 60%

- Final Exam

# Course Schedules

## ● Week 1

- Course Overview (Tues.)
- Introduction to RUP & UML (Thurs.)

## ● Week 2

- Usecase Diagram (Tues.)
- UML Tools (Thurs., Room 268, Computer Building)

## ● Week 3

- Usecase Diagram, Class Diagram (Tues.)
- Cases of Usecase Diagram (Thurs., Room 268, Computer Building)

# Course Schedules

## ● Week 4

- Class Diagram (Tues.)
- Cases of Class Diagram (Thurs., Room 268, Computer Building)
- Practical projects (Thurs. night, Practice)

## ● Week 5

- Class Diagram, Object Diagram and Package Diagram (Tues.)
- Cases of Class Diagram (Thurs., Room 268, Computer Building)
- Practical projects (Thurs. night, Practice)

# Course Schedules

## ● Week 6

- Package Diagram, Activity Diagram (Tues.)
- Cases of Activity Diagram (Thurs., Room 268, Computer Building)
- Practical projects (Thurs. night, Practice)

## ● Week 7

- State Machine Diagram (Tues.)
- Other UML Diagrams and Course Summary (Thurs.)
- Practical projects (Thurs. night, Practice)

## ● Week 8

- Show of Experimental works, Discussion, Q & A (Tues.)
- Final Exam (Thurs.)

# Topics

- Overview of relevant background knowledge
  - Software Engineering and UML
  - Object-oriented Technology and UML

# The Relationship Between Some Important Concepts

- Software Engineering
- Modeling
- Object-oriented Development Methods
- UML
- UML Tools (Such as Rational Rose)

# Software Engineering and UML

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/737060005053006134>